



## INTERNATIONAL ROAD DYNAMICS INC.

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### - Site Service Report -

March 20, 2007

**IRD SO#: 10407D**

**IRD Ref: 10407D**

**From: Richard Maynard**

**To: ESS**

**Project Name: LTPP Arizona SPS 2 - I-10**

**Project Location: I-10 MP108.6 Near Buckeye**

**Service Date(s): February 22, 2007**

**Weather:**

**Job Description:** Determine the cause of the loud signals at the site.

**Work Completed:**

Checked loop, scale, piezo, signal processing. All O.K. Also checked temperature sensor, hard drives, Com Ports, UPS, and modem. All O.K.

Replaced Pad #1 with a new one.

Reshimmed both pads.

**Work Remaining:**

Replace frames 1 & 2, replace weigh pad #2

**Parts Used:**

one (1) PAT Weigh Pad, shims

**Mileage / Travel Time:**

**Time Spent on Site:**

**Notes:**

Both pads were very noisy in the road and were loose enough in their frames that they could be made to flex by and both pads were above the roadway due to their frames being installed too high – pad 1 was 1/4" high on both the upstream and downstream edge and pad 2 was almost 1/4" on the downstream edge and just a little high on the upstream edge Pad 1 had a large divot taken out of it's rubber coating on it's upstream edge and had an upward bend in the middle even when taken out of the frame, replaced the pad with a new one, Pad 2 looked OK. Couldn't test the signals due to the controller being an iSync so left the pad in. Reshimmed both pads so that they sat straight in the roadway – this caused pad 1 to be 1/4" high all the way across and pad 2 a little under that. Both frames were installed too high and need to be replaced – both frames also had a bend in the center causing both pads to be bent up in the middle.

Both frames were installed too high so the previous installer did not put any shims but the 1/4" in to keep the pads low. Unfortunately, both frames were bowed upwards in the center and this meant

both pads were bolted down to the same bend. This caused both pads to loosen in the frame and pad 1 became permanently bent upwards. The #2 frame actually has two upward bows in it so was very hard to shim correctly. Both pads were above the roadway mostly in the wheelpaths, towards the end of the pad they were almost level with the roadway. Couldn't get a good reading from pad 2 (left wheel path) so took it out of the software – tuned in the loop to loop spacing to traffic and lowered the calibration factor of pad 1 so the weights were better – also lowered the dynamic compensation factor from 100 to 90 as the front axle weights were too heavy.

**Action Items:**

Item	Action Required	Ownership
1.	Replace Frames 1 & 2, replace weigh pad #2	ESS